

SPG 8500.2
December 2001

**John C. Stennis Space Center
Environmental Operations and
Implementation Program
Procedures and Guidelines**



National Aeronautics and
Space Administration

John C. Stennis Space Center
Stennis Space Center, MS 39529-6000

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page i of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Document History Log

Status/Change/ Revision	Change Date	Originator/Phone	Description
Basic	12/21/01	RA02/Ronald Magee X-87384	Initial Release

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page ii of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table of Contents

PREFACE.....	V
P.1 PURPOSE.....	V
P.2 APPLICABILITY.....	V
P.3 REFERENCES	V
P.4 CANCELLATION.....	VI
CHAPTER 1. RESPONSIBILITIES.....	1
1.1 CENTER DIRECTOR	1
1.2 DIRECTOR, CENTER OPERATIONS AND SUPPORT DIRECTORATE	1
1.3 ENVIRONMENTAL OFFICER.....	1
1.4 NASA/SSC ENVIRONMENTAL MANAGEMENT.....	1
1.5 NASA DIRECTORATES, RESIDENT AGENCIES, CONTRACTORS AND COMMERCIAL CUSTOMERS	2
CHAPTER 2. SCOPE.....	5
CHAPTER 3. PROCEDURES.....	6
3.1 ENVIRONMENTAL IMPACT AVOIDANCE.....	6
3.1.1 APPLICABLE LAWS AND REGULATIONS	6
3.2 AIR POLLUTION CONTROL.....	7
3.2.1 APPLICABLE LAWS AND REGULATIONS	7
3.2.2 GENERAL REQUIREMENTS	7
3.3 POTABLE WATER	9
3.3.1 APPLICABLE LAWS AND REGULATIONS	9
3.3.2 SAFE DRINKING WATER	9
3.4 WATER POLLUTION CONTROL.....	11
3.4.1 APPLICABLE LAWS AND REGULATIONS	11
3.4.2 WASTEWATER	11
3.4.3 STORMWATER.....	11
3.4.4 WETLANDS	11
3.5 SOLID AND HAZARDOUS WASTE MANAGEMENT.....	13
3.5.1 APPLICABLE LAWS AND REGULATIONS	13
3.5.2 SOLID WASTE	13
3.5.3 HAZARDOUS WASTE.....	14
3.6 CERCLA CLEAN UP SITES	16
3.6.1 APPLICABLE LAWS AND REGULATIONS	16
3.6.2 RELEASE REPORTING.....	16
3.6.3 INVESTIGATION AND REMEDIATION ACTIVITIES.....	17
3.7 SPILL PREVENTION AND RESPONSE	18
3.7.1 APPLICABLE LAWS AND REGULATIONS	18
3.7.2 SPILL, PREVENTION, CONTROL, AND COUNTERMEASURES	18

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page iii of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.7.3	INTEGRATED CONTINGENCY PLAN	19
3.7.4	RELEASE REPORTING.....	19
3.8	TOXIC SUBSTANCES CONTROL	20
3.8.1	APPLICABLE LAWS AND REGULATIONS	20
3.8.2	TOXIC SUBSTANCES CONTROL	21
3.8.3	POLYCHLORINATED BIPHENYL (PCB) MANAGEMENT	21
3.8.4	ASBESTOS MANAGEMENT	21
3.9	EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW	23
3.9.1	APPLICABLE LAWS AND REGULATIONS	23
3.9.2	EMERGENCY ACTION AND COMMUNITY RIGHT-TO-KNOW	23
3.9.3	REQUIRED REPORTING.....	24
3.10	PESTICIDE/HERBICIDE CONTROL.....	25
3.10.1	APPLICABLE LAWS AND REGULATIONS	25
3.10.2	PESTICIDE/HERBICIDE MANAGEMENT.....	25
3.11	ENVIRONMENTAL NOISE CONTROL	26
3.11.1	APPLICABLE REGULATIONS	26
3.11.2	NOISE AND VIBRATION	26
3.11.3	BACKGROUND NOISE LEVELS.....	26
3.12	RADIATION CONTROL.....	27
3.12.1	APPLICABLE LAWS AND REGULATIONS	27
3.12.2	RADIATION MANAGEMENT.....	27
3.13	HISTORICAL AND ARCHAEOLOGICAL RESOURCES MANAGEMENT	28
3.13.1	APPLICABLE LAWS AND REGULATIONS	28
3.13.2	HISTORICAL RESOURCES	28
3.13.3	ARCHAEOLOGICAL RESOURCES	29
3.14	MANAGEMENT OF FISH, WILDLIFE, AND PROTECTED SPECIES.....	30
3.14.1	APPLICABLE LAWS AND REGULATIONS	30
3.14.2	FISH AND WILDLIFE CONSERVATION.....	31
3.14.3	PRESERVATION OF THREATENED AND ENDANGERED SPECIES.....	31
3.14.4	LANDSCAPE MANAGEMENT.....	32
3.15	MANAGEMENT OF LEAD-CONTAINING MATERIALS	35
3.15.1	APPLICABLE LAWS AND REGULATIONS	35
3.15.2	LEAD-CONTAINING MATERIALS	35
3.15.3	LEAD WASTE DISPOSAL	35
3.16	POLLUTION PREVENTION AND AFFIRMATIVE PROCUREMENT	36
3.16.1	APPLICABLE LAWS AND REGULATIONS	36
3.16.2	POLLUTION PREVENTION AND AFFIRMATIVE PROCUREMENT.....	37
CHAPTER 4.	LAWS AND REGULATIONS	39
4.1	UNITED STATES CODES	39
4.2	CODE OF FEDERAL REGULATIONS	40
4.3	EXECUTIVE ORDERS.....	42
4.4	STATE REGULATIONS	42
APPENDIX A - ACRONYMS		44
APPENDIX B - DEFINITIONS.....		46

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page iv of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 1 - Required Actions under the National Environmental Policy Act.....	7
Table 2 - Required Actions under the Clean Air Act.....	8
Table 3 - Required Actions under the Safe Drinking Water Act	10
Table 4 - Required Actions under the Clean Water Act	12
Table 5 - Required Actions under the Resource Conservation and Recovery Act	15
Table 6 - Required Actions under CERCLA and SARA	18
Table 7 - Required Actions under the Oil Pollution Act and the Clean Water Act	20
Table 8 - Required Actions under the Toxic Substances Control Act	22
Table 9 - Required Actions under the Emergency Planning and Community Right-to-Know Act	24
Table 10 - Required Actions under the Federal Insecticide, Fungicide, and Rodenticide Act	25
Table 11 - Required Actions under the Noise Control Act	27
Table 12 - Required Actions under the Atomic Energy Act	28
Table 13 - Required Actions Related to Historical and Archaeological Resources.....	30
Table 14 - Required Actions Related to Fish, Wildlife, and Protected Species.....	34
Table 15 - Required Actions Related to Lead Management	36
Table 16 - Required Actions Related to Pollution Prevention.....	38

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page v of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

PREFACE

P.1 PURPOSE

This document contains procedures for the John C. Stennis Space Center (SSC) to recognize environmental considerations in the planning and execution of projects, programs, or institutional operations. Efforts shall be directed at meeting the requirements associated with federal, state, and local regulatory concerns as appropriate. The environmental staff shall coordinate, primarily through the Environmental Management System Core Team, Environmental Working Group, NASA directorates and offices, resident agencies, contractors, and commercial customers to promote site-wide environmental compliance.

P.2 APPLICABILITY

The provisions of this instruction are applicable to the activities of all organizations and personnel at SSC, including NASA, other federal agencies, state agencies, universities, contractors, and any other organization either permanently or temporarily working on the Center.

P.3 REFERENCES

Referenced documents are assumed to be the latest revision unless otherwise specified.

- a. NPD 8500.1, *NASA Environmental Management*
- b. NPG 8570.1, *Energy Efficiency and Water Conservation Technologies and Practices*
- c. NPG 8800.11, *Procedures for Implementing the Provisions of the National Environmental Policy Act (NEPA)*
- d. NPG 8820.3, *Pollution Prevention*
- e. NPG 8830.1, *Affirmative Procurement Plan for Environmentally Preferable Products*
- f. NPG 8850.1, *Environmental Investigation and Remediation - Potentially Responsible Party Identification and Analysis*
- g. SPG 4130.1, *Control of Hazardous Materials*
- h. SPG 4130.2, *Hazardous Materials, Hazardous Waste, and Solid Waste Handbook*

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page vi of vi		
Responsible Office: RA02/ Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

- i. SPG 4130.3, *Integrated Contingency Plan*
- j. SPG 8500.1, *Environmental Management System Procedures and Guidelines*

P.4 CANCELLATION

SPG 4130.5, *Environmental Management Program*, dated February 11, 1997.

Original Signed by

Mark Craig
Acting Director

DISTRIBUTION:

SDL-2
NODIS

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 1 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

CHAPTER 1. RESPONSIBILITIES

1.1 Center Director

The Center Director is responsible for environmental compliance.

1.2 Director, Center Operations and Support Directorate

The Director, Center Operations and Support Directorate, is responsible for administration of environmental compliance activities. This includes signature authority for permit applications, permits, and other compliance documents that function to commit the Government to meet a specific set of conditions relative to environmental compliance.

1.3 Environmental Officer

The Environmental Officer (EO) is responsible for the following:

- a. Oversight of environmental compliance activities and interfacing with environmental regulatory concerns for SSC. This includes signature authority for hazardous waste manifests, as well as, environmental reports submitted to regulatory agencies per regulation and/or permit requirements.
- b. Advising senior management and NASA Headquarters on issues of noncompliance and initiating and/or recommending corrective action as required. The EO has cease and desist authority over any activity at SSC not in compliance with environmental laws and regulations.

1.4 NASA/SSC Environmental Management

The NASA/SSC Environmental Management staff is responsible for the following:

- a. Providing the management and system integration of all environmental activities.
- b. Maintaining an environmental management system (EMS) that meets the requirements of SPG 8500.1, *Environmental Management System*. The EMS assures the proper handling and disposal of hazardous wastes and that compliance reports and other documentation are maintained and submitted to regulatory authorities as appropriate.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 2 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

- c. Providing for the management and/or maintenance of the hazardous waste clean up sites, natural resources such as timber, water and wetlands, and cultural resources such as the extinct town of Gainesville and the historic Apollo-era rocket engine test stands, which are managed and maintained by the SSC Propulsion Test Directorate.
- d. Providing a system of environmental review of all activities at SSC in compliance with the National Environmental Policy Act (NEPA). This is inclusive of the maintenance of the SSC Environmental Resources Document and the management of project specific NEPA documentation preparation including Preliminary Environmental Surveys (PES), Record of Environmental Considerations (REC), Environmental Assessments (EA), and Environmental Impact Statements (EIS).
- e. Providing a system of compliance audits to assure environmental compliance of activities at all levels throughout the Center. This includes the audit of resident agencies, contractors and commercial customers, to safeguard SSC from any adverse impacts resulting from their activity.
- f. Providing management of the development of environmental permit applications for compliance with federal, state and local regulations, as well as providing the negotiations necessary for the acquisition of these permits.
- g. Providing technical leadership to the Environmental Working Group, which is comprised of representatives from NASA's directorates, other federal agencies, universities and contractors. The EO serves as the chair of the Working Group.
- h. Providing a system to evaluate NASA, NASA contractors, and resident agency environmental compliance.
- i. Providing external interfaces for SSC relative to environmental subject matter.
- j. Planning and justifying the necessary resources to assess, monitor, evaluate and control, through the appropriate channels, the Center's environmental quality on a continuing basis.

1.5 NASA Directorates, Resident Agencies, Contractors and Commercial Customers

The individual NASA Directorates, resident agencies, contractors, and commercial customers, including those that are located temporarily at the Center, shall:

- a. Designate an Environmental Coordinator to be a representative on the Environmental Working Group, if the organization uses hazardous materials or otherwise has the potential to affect the environment.
- b. Recycle paper and cardboard in accordance with Executive Order 13101.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 3 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

- c. Correct all deficiencies that are identified during an internal audit and provide written documentation of the corrective actions taken.
- d. Ensure that personnel are properly trained to engage in an environmentally regulated activity.
- e. Provide secondary containment for storage tanks for hydrocarbon products of all sizes. Due to the fact that the Center is a large offshore storage facility, there are no size exemptions for secondary containment requirements.
- f. Submit an annual hazardous material inventory by close of business January 10 of each year to the FOSC Environmental Services Office for compilation into the Center-wide system. Materials Safety Data Sheets should also be available for inspection for all products used at the Center and, if requested, copies are to be provided to the FOSC.
- g. Provide the NASA/SSC Environmental Management notifications of any new activity or changes to existing operations/activities by the submittal of a completed PES (SSC Form # 696M) in order that environmental considerations can be included in the early planning phase of new projects.
- h. Provide funding using the Stennis Work Request (SSC Form # 704) for all environmental activities required for their responsible activities or projects, including the disposition of hazardous waste and wetland impact mitigation. Funding would also be necessary to modify NASA held permits and the development of PES, EA, and EIS as necessary prior to proceeding with a project.
- i. Provide for proper management of satellite accumulation areas per regulatory guidance. Obtain an Environmental Protection Agency (EPA) Hazardous Waste Identification (ID) Number and the disposition of waste can be coordinated with FOSC Safety and Environmental Services Office using SSC Form # 704. The owner of the EPA ID number must sign all manifests.
- j. Obtain a wetland impact authorization permit prior to conducting land preparation activities and submit a Timber Removal Request (SSC Form # 739) to NASA/SSC Environmental Management for the removal of marketable timber, which is considered a government resource. Early coordination will minimize potential construction delays.
- k. Since SSC is a National Remote Sensing Verification Site, no open burning is allowed without coordination with NASA Environmental Management for appropriate scheduling of the burn activity. Coordination is necessary to assure no interference with remote sensing acquisitions over the Center and the surrounding area. Stumps and other debris from land

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 4 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

clearing operations should be buried at or near the construction site in an area covered by wetland permitting unless the EO approves an alternative.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 5 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

CHAPTER 2. SCOPE

This SPG covers the requirements for all federal and state agencies, contractors and commercial customers who are either permanently or temporarily located at SSC who must receive approval for all activities that affect, or potentially affect, the land, water, groundwater or air resources of SSC. This requirement also applies to activities that produce either hazardous or non-hazardous waste, utilize the Center's drinking water or sewage collection/treatment system, or use hazardous materials or hydrocarbon-based products.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 6 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

CHAPTER 3. PROCEDURES

The procedures under this SPG are to provide the SSC personnel with an overview of compliance issues and to specify actions that are required by NASA, resident agencies, contractors, and commercial customers or other contractors prior to initiation of actions which may have the potential to impact environmental media.

3.1 Environmental Impact Avoidance

3.1.1 Applicable Laws and Regulations

National Environmental Policy Act (41 USCA § 4321 to 4370c); 40 CFR 1500-1517

The National Environmental Policy Act (NEPA), as amended under Section 102, requires that all Federal agencies consider the environmental effects of proposed actions. The Act under Section 103 specifies that Federal agencies adopt administrative regulations, policies, and procedures to ensure decisions are made in accordance with the purposes and provisions of NEPA. In response to Section 103 of NEPA, SSC has issued this SPG as a management tool to define the functional structure for environmental compliance at the Center. It is a guide to direct individuals and/or organizations operating at SSC in the requirements needed to ensure compliance with the NASA regulations governing their operations.

NASA, resident agencies, contractors, and commercial customers are required to submit a Preliminary Environmental Survey prior to beginning any construction or maintenance activity. This process allows the NASA/SSC Environmental Management to review proposed site activities and make recommendations to insure adequate protection of the environment. There are three levels of response to the Preliminary Environmental Survey (PES) SSC Form #696M, a Record of Environmental Consideration (REC), an Environmental Assessment (EA), or an Environmental Impact Statement (EIS). If an EA or EIS development is required, this is the responsibility of the implementing agency or commercial contract to fund and implement. NASA would have to concur on the Finding of No Significant Impact or the Record of Decision since the project would be located at Stennis.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 7 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 1 - Required Actions under the National Environmental Policy Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.1.1	Preliminary Environmental Survey must be furnished during the planning of maintenance and construction activities	NASA, Resident Agencies, Contractors, Commercial Customers	PES/SSC Form # 696M to NASA/SSC Environmental Management	Prior to new projects
3.1.1	Record of Environmental Consideration - May call for further action	NASA Environmental Management	Letter from EO to originator	As required
3.1.1	Environmental Assessment - Assesses the consequences of actions and their impact on the environment	NASA Environmental Management	Publication and Public Comment	As required
3.1.1	Environmental Impact Statement - Describes the environmental impacts and what mitigation actions will be required	NASA Environmental Management	Publication and Public Comment	As required

3.2 Air Pollution Control

3.2.1 Applicable Laws and Regulations

Clean Air Act (42 USCA § 7401 to 7671q); 40 CFR 50-93; MDEQ Air Emission Regulations APC-S-1 through APC-S-6

3.2.2 General Requirements

The U.S. Environmental Protection Agency (EPA) has authorized the Mississippi Department of Environmental Quality (MDEQ) as the air pollution permitting authority and compliance agency for the State of Mississippi. The Environmental Resource Document describes the air permitting activity for SSC.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 8 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

NASA, resident agencies, contractors, and commercial customers must coordinate any activities that will emit or will have the potential to emit air pollutants with NASA/SSC Environmental Management to ensure the activity is in compliance with the Clean Air Act (CAA) and the Title V operating permit (Permit number 1000-00005). An air emissions permit to operate must be obtained from the MDEQ prior to initiation or modification of an air pollution emission source. In some cases, construction of a facility may not be allowed until notification has been received from the MDEQ for new air emission sources, therefore early coordination is essential. If the potential quantities of air emissions are significant, the risk of emissions leaving SSC in a hazardous quantity must be evaluated in accordance with 40 CFR 50-51.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 2 - Required Actions under the Clean Air Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.2.2	Report any non-permitted air emission points	NASA, Resident Agencies, Contractors, and Commercial Customers	Memo or letter to the NASA Environmental Management	As required
3.2.2	Notification of plans to construct, modify, or change equipment that has an air pollution emission	NASA, Resident Agencies, Contractors, and Commercial Customers	PES to NASA Environmental Management	As required
3.2.2	Application to modify the Title V Operating Permit or acquire a new permit	NASA, Resident Agencies, Contractors, and Commercial Customers	Application to MDEQ	As required
3.2.2	Monthly reporting of air emissions and opacity readings	NASA, Resident Agencies, Contractors, and Commercial Customers	SCWI 8500-0001-EMS	Monthly

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 9 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.2.2	Risk Management Planning for air emissions	NASA, Resident Agencies, Contractors, and Commercial Customers	Notification to MDEQ and EPA	As required

3.3 Potable Water

3.3.1 Applicable Laws and Regulations

Safe Drinking Water Act (42 USCA § 300f to 300j-26); 40 CFR 141-143; Title 49, Chapter 17 Mississippi Safe Drinking Water Law

3.3.2 Safe Drinking Water

SSC does not operate a Public Water System as defined under the Safe Drinking Water Act (SDWA) but is subject to regulation under the SDWA for the monitoring of lead and copper. The EO is responsible for ensuring the potable water complies with the Act as prescribed by the Mississippi Department of Health (MSDH). Three large capacity wells supply potable water and three supply industrial water. The wells are operated under groundwater withdrawal permits issued by the State of Mississippi. The permit numbers are 01907, 01908, 01909, 01910, 01911, and 01912. Details of the wells and permits are described in the ERD. The actual distribution of potable water at SSC is implemented in accordance with the MSDH permit number MS 230015. Test records for the quality of potable water are maintained with NASA Environmental Management. Annually, a Consumer Confidence Report (CCR) is published to inform water supply users of the quality of the water. NASA, resident agencies, contractors, and commercial customers must coordinate any activities that utilize or plan to utilize water with SSC Environmental Management. Furthermore, the location of an operation within 400 feet of any wellhead must be evaluated to safeguard these areas from potential contaminants in accordance with 40 CFR 141-143.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date: December 21, 2001	
	Expiration Date: December 21, 2006	
		Page 10 of 47
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Page 10 of 47

Table 3 - Required Actions under the Safe Drinking Water Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.3.2	Notification of any activity that creates or changes demand on the SSC water supply or that will be located within 400 feet of wellheads.	NASA, Resident Agencies, Contractors, Commercial Customers	PES/SSC Form # 696M to NASA Environmental Management	As required
3.3.2	Application for permit to withdraw waters of the State for beneficial use	NASA Environmental Management	Form provided by MSDH	Prior to water use
3.3.2	Public Health Water Supply Survey	NASA Environmental Management	Form provided by MSDH	Annual
3.3.2	Notification of Public Water Supply Responsible Officials & Operators	NASA Environmental Management	Form provided by MSDH	Annual
3.3.2	State Water Usage Report	NASA Environmental Management	Letter Format	Quarterly
3.3.2	Drinking Water, Microbiological Analysis	NASA Environmental Management	Form provided by MSDH	Monthly
3.3.2	Industrial Water System Usage Report	NASA Environmental Management	Form provided by MSDH	Annual
3.3.2	Cross Connection Notification/Report	NASA, Resident Agencies, Contractors, Commercial Customers	Form provided by MSDH	Annual

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 11 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.4 Water Pollution Control

3.4.1 Applicable Laws and Regulations

Coastal Zone Management Act (16 USCA § 1451 to 1464); Federal Water Pollution Control Act (33 USCA § 1251 to 1387); 33 CFR 322; 33 CFR 323; 33 CFR 330; 40 CFR 104-149; Executive Orders 11988, 11990, and 12088

3.4.2 Wastewater

Section 313(a) of the Federal Water Pollution Control Act (also known as the Clean Water Act) requires permits for federal facilities to comply with all federal, state, interstate and local pollution control requirements. Wastewater discharges are permitted under the National Pollution Discharge Elimination System (NPDES) number MS0021610. NASA Environmental Management is responsible for maintaining compliance with this permit. Permit modification may be required for any new activity or process, which would create a new point source of wastewater, increase the volume of an existing discharge, or alter the composition of an existing discharge.

SSC organizations whose activities involve the generation or disposal of industrial wastewater are required at all times to properly operate and maintain all facilities and systems of collection, treatment, and control which are used to achieve compliance with the existing NPDES permit.

3.4.3 Stormwater

Construction projects, and other projects involving land clearing, have the potential to result in stormwater erosion of surface soils. Because this kind of stormwater erosion can have adverse impacts on surface water bodies, physical barriers (silt fences, hay bales, etc.) are generally required during construction.

A PES must be submitted to NASA Environmental Management for all land clearing projects. The Environmental Management staff must submit an application for coverage under the Mississippi Construction Storm Water General Permit for all projects involving an area of one acre or greater. This application must include a stormwater pollution prevention plan and a United States Geological Survey (USGS) quadrangle map of the proposed site. Sites that are accepted for coverage under the General Permit must be inspected weekly and a report must be submitted to the MDEQ monthly.

3.4.4 Wetlands

The U.S. Army Corps of Engineers (COE) considers a large portion of both the Fee Area and the Buffer Zone jurisdictional wetlands due to the presence of hydric soils and hydrophytic vegetation. A map showing the potential SSC wetlands areas is provided in the SSC ERD.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 12 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

A permit is usually required for any work disturbing a wetland or waterway. A PES must be submitted to NASA Environmental Management prior to beginning such work, especially for projects that may involve dredging, filling, or tree removal. A USGS quadrangle map must be submitted with the PES, clearly indicating the locations of proposed development. If any such proposed project would impact an area officially designated as a wetland, the SSC Environmental Management must submit a wetland permit to the COE. An analysis of alternatives and early public notice of proposed actions are required prior to approval for projects with floodplain or wetlands impact. Mitigation will usually be required for all wetland impacts and these costs must be estimated and included in the project's design cost.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 4 - Required Actions under the Clean Water Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.4.2	Notification to and approval from NASA Environmental Management prior to initiating any discharge from operations	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.4.2	Application for a new Discharge Point	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.4.2	Application to modify NPDES permit due to a new activity or process which would increase the volume or alter the composition of an existing discharge	NASA, Resident Agencies, Contractors, Commercial Customers	Permit Modification Application to MDEQ	As required
3.4.2	National Pollutant Discharge Elimination System Report	NASA Environmental Management	Form provided by State	Monthly
3.4.3	Notification of proposed construction or other land clearing that will affect one acre or more	NASA, Resident Agencies, Contractors,	PES to NASA Environmental Management	Prior to land clearing

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 13 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
	clearing that will affect one acre or more	Commercial Customers	Management	clearing
3.4.4	Notification of activities involving dredging, filling, or otherwise disturbing wetlands	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	Prior to wetland activity
3.4.4	Application to Corps of Engineers (COE) for wetland permit	NASA Environmental Management	Form provided by COE	Prior to wetland activity
3.4.4	Request to remove timber	NASA, Resident Agencies, Contractors, Commercial Customers	SSC Form #739 to NASA Environmental Management	Prior to land clearing

3.5 Solid and Hazardous Waste Management

3.5.1 Applicable Laws and Regulations

Resource Conservation and Recovery Act (42 USCA § 6901 to 6992k); 40 CFR 241, 255-273
Mississippi Non-Hazardous Waste Management Regulations

3.5.2 Solid Waste

The Resource Conservation and Recovery Act (RCRA) was enacted to regulate all aspects of solid and hazardous waste management from generation to ultimate disposal. The Mississippi Department of Environmental Quality (MDEQ) administers non-hazardous and hazardous waste programs, as well as the waste reduction/waste minimization program.

SSC generates solid waste consisting of household-type wastes and non-hazardous industrial waste, which are disposed of on-site in a Class A sanitary landfill (permit number SW02401B0376). SSC also maintains a permit for Class II vegetative rubbish disposal for the two active and one inactive wastewater treatment lagoons, one Class II demolition debris rubbish site, and a General Permit Class II rubbish site, which is located adjacent to the landfill, is for

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 14 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

disposal of asphalt, stone, brick, mortar, natural vegetative materials, and unpainted, untreated wood debris.

3.5.3 Hazardous Waste

SSC generates hazardous waste from its research and development operations, laboratories, instrument repair, and operations and maintenance functions. SSC is classified as a large quantity generator and operates under the EPA ID number MS 2800090001. Six resident agencies are classified as small quantity generators or conditionally exempt and operate under their own EPA ID numbers. The SSC Hazardous Materials, Hazardous Waste, and Solid Waste Handbook govern the management of solid and hazardous waste at SSC. Resident agencies, contractors, and commercial customers that generate hazardous waste must ensure that their activities are conducted in a manner that prevents the uncontrolled release of these wastes or materials into the environment. Hazardous wastes may be temporarily stored near their point of generation in "satellite accumulation areas" provided that:

- a. The containers are properly labeled.
- b. There is a designated individual responsible for the storage area.
- c. No more than 55 gallons of waste is stored in any single satellite accumulation area.
- d. The container(s) are kept on a spill control pallet and grounded if the waste is flammable.
- e. The container(s) are compatible with the waste, in good condition, and kept closed except when adding or removing wastes.

The SSC Environmental Management provides technical consultation services to NASA, resident agencies, contractors, and commercial customers to aid in the characterization of hazardous wastes and to ensure that hazardous wastes are properly handled and stored. NASA maintains a 90-day hazardous waste accumulation area for wastes generated by NASA and its contractors. Hazardous waste collection services are provided for NASA and its contractors.

Offsite disposal of hazardous waste is periodically coordinated through NASA Environmental Management, utilizing pre-approved treatment, storage, and disposal contractors. Resident agencies, contractors, and commercial customers may make arrangements to include their hazardous wastes on these periodic shipments. However, they must have a valid EPA Identification number and store their hazardous wastes in their own designated areas until shipment arrangements are complete.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date: December 21, 2001	
	Expiration Date: December 21, 2006	
		Page 15 of 47
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 5 - Required Actions under the Resource Conservation and Recovery Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.5.2	Industrial, Commercial, and Institutional Non-hazardous Solid Waste Generator Survey.	NASA Environmental Management	Form provided by State	Annually
3.5.2	Applications for landfill/rubbish site permit renewals, modifications, or waivers	NASA Environmental Management	Form provided by State or other correspondence	As required
3.5.3	Notification prior to initiating any activity or process which will result in a new hazardous waste stream	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.5.3	Set up new hazardous waste satellite accumulation storage area and train the responsible personnel	FOSC Environmental Service Office	Documentation of training	As required
3.5.3	Update employee training for hazardous material and hazardous waste handlers	NASA, Resident Agencies, Contractors, Commercial Customers	Filed at handlers' organization	Annually
3.5.3	90 Day Hazardous Waste Accumulation Area Log	NASA's FOSC Environmental Service Office	SSC Form # 696J	Keep updated at all times
3.5.3	90 Day Hazardous Waste Accumulation Area Inspection Check sheet	NASA's FOSC Environmental Service Office	SSC Form # 696J	Weekly

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 16 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.5.3	Annual Hazardous Waste Activities Report	NASA, Resident Agencies, Contractors, Commercial Customers	Form provided by MDEQ	Annually
3.5.3	Request for collection and disposal of hazardous material and/or hazardous waste	NASA, Resident Agencies, Contractors, Commercial Customers	SSC Form # 696F	As required
3.5.3	Offsite treatment, storage, and disposal facility audits	NASA's FOSC Environmental Services	Written report	Annually
3.5.3	Update Hazardous Materials, Hazardous Waste, and Solid Waste Plan	NASA Environmental Management	Updated procedures	As required

3.6 CERCLA Clean Up Sites

3.6.1 Applicable Laws and Regulations

Comprehensive Environmental Response, Compensation, and Liability Act (42 USCA § 9601 to 9675); 40 CFR 300-374; Executive Order 12580

3.6.2 Release Reporting

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Re-authorization Act (SARA) includes lists of hazardous substances and threshold quantities at 40 CFR 302 and 40 CFR 355. Any release of a CERCLA hazardous substance in a quantity equal to or greater than the threshold quantity must be immediately reported to the National Response Center (NRC).

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 17 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

On-site notification procedures for spills or releases are spelled out in the *SSC Integrated Contingency Plan*. In all cases the person(s) discovering the release should contact the SSC Dispatcher at extension **911**. The SSC Incident Commander (the SSC Fire Chief) will determine the appropriate classification and response actions and notify NASA Environmental Management. All official notifications to regulatory agencies, including the NRC, are to be made by the SSC EO or designee.

3.6.3 Investigation and Remediation Activities

SSC is in the process of investigating potential historical spills, releases, and disposal incidents under CERCLA. Section 120 of CERCLA as amended by SARA mandated that EPA establish a "docket", or listing, of Federal facilities where hazardous waste has been generated and/or stored, treated or disposed of in the past. Although SSC has not been listed as a CERCLA facility, NASA has taken a proactive approach to investigate areas that may have been impacted by historical releases.

Under the CERCLA site investigation process, the first step involves conducting a Preliminary Assessment (PA) to determine whether or not further investigation is warranted. PAs were conducted for forty sites at SSC. Twenty-six of these sites were found to be clean or to have contamination that can be easily removed. In the latter case, most of the contaminated media has been removed. Fourteen sites required additional investigation where the sampling of various media (i.e. soil, groundwater, surface water) for contamination has been or will be conducted. Of the fourteen sites, nine sites have been designated as Clean Up Areas A through I, four sites are potential "no further action" (NFA) sites, and one is a long-term monitoring site. Remedial systems are being installed at five of the nine Clean Up Areas. The remaining four Clean Up Areas are undergoing various stages of Remedial Investigation/Feasibility Study (RI/FS). Once the RI/FSs are complete and the extent of contamination is determined at these sites, an evaluation of potential risks and the feasibility of soil and groundwater clean up options will be made.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 18 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 6 - Required Actions under CERCLA and SARA

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.6.2	Notification immediately upon discovery of a release of a potentially hazardous substance	NASA, Resident Agencies, Contractors, Commercial Customers	Call 911 , followed by submittal of an Incident Report Form (SSC-696D)	As required
3.6.3	Notify NASA Environmental Management within 24 hours of discovery of a contaminated site	NASA, Resident Agencies, Contractors, Commercial Customers	Verbal followed by written to the Environmental Management	As required

3.7 Spill Prevention and Response

3.7.1 Applicable Laws and Regulations

Oil Pollution Act (33 USCAA § 2701 to 2761); Federal Water Pollution Control Act (33 USCA § 1251 to 1387); 40 CFR 110-114

3.7.2 Spill, Prevention, Control, and Countermeasures

NASA/SSC is classified as an on-shore facility, as defined in 40 CFR 112. A *Spill Prevention Control and Countermeasure Plan* (SPCC Plan) is required because bulk storage facilities and minor transfer operations could, in the event of an accident, be reasonably expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines. The SPCC Plan is included in the *SSC Integrated Contingency Plan*. The SPCC Plan provides information on all bulk storage facilities (aboveground and underground) and transfer facilities for petroleum products, and the various controls in place to prevent and/or control releases.

SSC organizations are required to provide secondary containment for all aboveground bulk storage tanks that are used to store petroleum products or other liquids that would be considered pollutants in the event of an accidental release. (Due to the large quantities of petroleum products at SSC, there are no minimum quantity exemptions for aboveground storage tanks.)

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 19 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.7.3 Integrated Contingency Plan

The *SSC Integrated Contingency Plan* (ICP) is intended to delineate responsibilities, identify facilities, and establish procedures relevant to preparing for and responding to releases of oil and/or hazardous materials. This includes hazardous material incidents involving fire or explosion, or the imminent threat thereof. The procedures in the ICP apply to all agencies, organizations, contractors, and their employees performing work at SSC. Each organization is responsible for training employees regarding their responsibilities in the case of a release or spill. At a minimum, each employee should be aware of the hazards associated with materials that they work with, and they should know the notification procedures to follow in the event of a spill or other incident.

The ICP was prepared in accordance with the *National Response Team's Integrated Contingency Plan Guidance* (Federal Register, Page 28642, Volume 61, Number 109, June 5, 1996). It is organized into three main sections: an introductory section, a core plan, and a series of supporting annexes. The core plan includes essential response procedures and outlines a hierarchy of incident response levels. The annexes include more detailed supporting information.

NASA/SSC Environmental Management has primary responsibility for all planning and reporting requirements and for conducting spill/discharge containment, cleanup, and disposal activities. The FOSC is responsible for the planning, equipment, and coordination activities associated with the ICP and for the appointment of an SSC Incident Commander, who is responsible for response activities.

3.7.4 Release Reporting

The Clean Water Act includes a list of hazardous substances and threshold quantities at 40 CFR 116-117. Any release of a listed hazardous substance in a quantity equal to or greater than the threshold quantity must be immediately reported to the National Response Center (NRC). The NRC must also be notified in the event of a discharge of oil to navigable waters, which creates sheen, results in deposits of sludge beneath the surface or on the shoreline, or violates applicable water quality standards.

On-site notification procedures for spills or releases are spelled out in the SSC ICP. In all cases the person(s) discovering the release should contact the SSC Dispatcher at extension **911**. The SSC Incident Commander (the Fire Chief) will determine the appropriate classification and response actions and notify SSC Environmental Management. All official notifications to regulatory agencies, including the NRC, are to be made by the SSC Environmental Officer or designee.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 20 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 7 - Required Actions under the Oil Pollution Act and the Clean Water Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.7.2	Notify NASA Environmental Management prior to constructing or installing storage or transfer facilities for petroleum products	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.7.2	MS Department of Environmental Quality Underground Storage Tank Status Report	NASA Environmental Management	Form provided by MDEQ	Annual
3.7.3	Update the ICP	NASA Environmental Management	As per NRT Guidance Document	As required
3.7.4	Notification immediately upon discovery of a release of a potentially hazardous substance	NASA, Resident Agencies, Contractors, Commercial Customers	Call 911 , followed by the submittal of an Incident Report SSC Form # 696D	As required

3.8 Toxic Substances Control

3.8.1 Applicable Laws and Regulations

Toxic Substances Control Act (15 USCA § 2601 to 2671); Occupational Safety and Health Act (29 USCA § 651 et seq.); 40 CFR 700-799; 29 CFR 1910.1001

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 21 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.8.2 Toxic Substances Control

The Toxic Substances Control Act (TSCA) was enacted to protect human health and the environment by regulating chemicals used in commerce and newly developed chemicals. Under TSCA, EPA places controls on chemical manufacture, distribution, use, and disposal. Included in TSCA are a variety of requirements to control the manufacture, distribution in commerce, use, and disposal of specific chemical substances or mixtures. At SSC, TSCA's primary applicability relates to the decontamination and disposal of PCB-contaminated electrical equipment and the removal and disposal of asbestos insulating materials.

3.8.3 Polychlorinated Biphenyl (PCB) Management

The existing inventory of PCB contaminated transformers is gradually being reduced through replacement. Some transformers were retrofilled with non-PCB electrical insulating oil but over time most of these transformers have had to be reclassified as PCB-contaminated in compliance with 40 CFR 761.

In addition to transformers, many of the facility's older fluorescent lighting fixtures contain ballasts that contain PCB's. When these ballasts are removed from service, they are replaced with non-PCB ballasts. The PCB-containing ballasts and any PCB-contaminated transformers taken out of permanent service are collected by the FOSC for disposal in accordance with procedures in the *SSC Hazardous Materials, Hazardous Waste, and Solid Waste Plan*.

3.8.4 Asbestos Management

Asbestos Containing Material (ACM) was used in the past at SSC for fire protection and thermal insulation. The *SSC Asbestos Hazard Control Plan* serves as an operations and maintenance plan for managing asbestos in place by monitoring and maintaining its condition, ensuring proper cleanup of fibers previously released, and preventing further release. On-going monitoring has shown that the measured concentration of asbestos in SSC buildings is less than the 0.01 fibers per cubic centimeter (cc). The current OSHA standard for asbestos workers is 0.10 fibers/cc.

All activities, which could potentially disturb ACM, are controlled. Operations and maintenance work practices have been established, including worker health and safety training and protection, record keeping of all documents related to asbestos management, and approval procedures for operations and maintenance activities in areas where ACM may be disturbed.

When renovation, demolition, or deterioration requires the removal of asbestos-containing surface material or thermal system insulation, a licensed asbestos abatement contractor in accordance with state and federal regulations performs the work. All removed asbestos is disposed of in the on-site non-hazardous solid waste landfill as approved by the Mississippi Department of Environmental Quality (MDEQ). MDEQ requires a 10-day advance notification

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 22 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

of all building demolition (even if they do not contain asbestos) and all renovations of areas that contain asbestos.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 8 - Required Actions under the Toxic Substances Control Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.8.3	PCB Management Report	NASA Environmental Management	Update Inventory of PCB transformers	Annually
3.8.3	Notification of PCB Activity	NASA Environmental Management	EPA Form # 7710- 53	Annually
3.8.3	Notification immediately upon discovery of a release oil from an electrical transformer	NASA, Resident Agencies, Contractors, Commercial Customers	Call 911 , followed by submittal of an Incident Report Form (SSC-696D)	As required
3.8.4	Attend annual awareness briefing	NASA, Resident Agencies, Contractors, Commercial Customers	Not applicable	Annually
3.8.4	Training and certification for asbestos- related work	NASA, Resident Agencies, Contractors, Commercial Customers	Each organization maintains master list of certified personnel	Annually
3.8.4	Surveillance and monitoring of ACM	FOSC Safety or Environmental Services Office	Information posted on SSC homepage	Annually

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 23 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.8.4	Request to conduct Asbestos O & M Activity	FOSC Environmental Services Office	SSC Form # 740	As required
3.8.4	Request to perform demolition on any building at SSC that contain asbestos	NASA Environment Management	Form generated by MDEQ	As required
3.8.4	Request to conduct renovations of buildings containing asbestos	NASA Environmental Management	Form generated by MDEQ	As required
3.8.4	Update Asbestos Hazard Control Plan	NASA Environmental Management	Plan	Biannually

3.9 Emergency Planning and Community Right-to-Know

3.9.1 Applicable Laws and Regulations

Emergency Planning and Community Right-to-Know Act (42 USCA § 11001 to 11050);
40 CFR 350-374

3.9.2 Emergency Action and Community Right-to-Know

The Emergency Planning and Community Right to Know Act (EPCRA), which is Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), has three main provisions. It established state and local emergency planning organizations. It also requires that facilities report the types and amounts of listed hazardous substances, if the quantity stored is equal to or greater than the specified threshold planning quantity. Finally, it requires facilities to immediately report releases of listed hazardous substances.

The purpose of the Act is to encourage emergency-planning efforts at the state and local levels and to increase the public's access to information about the potential chemical hazards that exist in their communities.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date: December 21, 2001	
	Expiration Date: December 21, 2006	
		Page 24 of 47
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.9.3 Required Reporting

NASA Environmental Management is required to submit a Tier II report annually to disclose the types and quantities of listed hazardous substances stored on-site during the previous year. The information used to prepare this report comes from the SSC Hazardous Material Inventory forms submitted by each organization at SSC.

Additionally, NASA Environmental Management is also required to submit a Toxic Release Inventory (TRI) Report annually. The TRI report discloses the types and quantities of listed hazardous substances that were released to the environment during the previous year. This should include both routine, accidental releases and disposal quantities.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 9 - Required Actions under the Emergency Planning and Community Right-to-Know Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.9.3	Hazardous Material Inventory Form	NASA, Resident Agencies, Contractors, Commercial Customers	SSC Form # 696B	Annually
3.9.3	SARA Tier II Report	NASA Environmental Management	OMB Form # 2050-0072	Annually
3.9.3	Toxic Release Inventory Report	NASA Environmental Management	EPA Form R	Annually

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 25 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.10 Pesticide/Herbicide Control

3.10.1 Applicable Laws and Regulations

Federal Insecticide, Fungicide, and Rodenticide Act (7 USCA § 136 to 136y); Mississippi Department of Agriculture and Commerce, Division of Plant Industry Regulations; 40 CFR 152-186

3.10.2 Pesticide/Herbicide Management

Use, storage, delivery, and disposal of insecticides and herbicides is regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). FIFRA outlines registration requirements for pesticide producers, certification requirements for pesticide applicators, and directs EPA to set regulations for the acceptance of certain pesticides and recommended procedures for the disposal and storage of pesticides and pesticide containers.

Presently, SSC has obtained an off-site contractor for most insecticide and herbicide treatment operations. Minimal quantities of insecticides and herbicides are stored on-site. The off-site contractor utilizes the Integrated Pest Management (IPM) approach, which minimizes chemical application. The contractor is responsible for disposing of any waste pesticides at an off-site facility in accordance with state and federal regulations.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Table 10 - Required Actions under the Federal Insecticide, Fungicide, and Rodenticide Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.10.2	Notification of any activity which would increase the quantity of pesticides applied or stored on-site	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.10.2	Pesticide Usage Report	NASA Environmental Management	8-1/2 x 11 Formatted Report	Annually

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 26 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.11 Environmental Noise Control

3.11.1 Applicable Regulations

Noise Control Act (42 USCA § 4901 et seq.); Occupational Safety and Health Act (29 USCA § 651 et seq.)

3.11.2 Noise and Vibration

Due to the nature of static rocket engine testing, noise and to a lesser extent vibration have always been issues at SSC. NASA acquired the land area that makes up the Buffer Zone (approximately 125,000 acres) in order to mitigate the impact of noise on local communities.

The soils at SSC are generally composed of poorly to somewhat poorly drained silty and loamy soils. Wetness, high organic content and weathered clay mineralogy generally characterizes them. These soils tend to dampen the effects of vibration resulting from engine testing. In fact, years of testing the Saturn V rocket motor (which was considerably more powerful than the engines currently being tested) resulted in no significant adverse effects to buildings.

3.11.3 Background Noise Levels

Generally, background noise levels at SSC are low. The effects of the generators, pumps and boilers are minimal because they are contained for the most part within structures. Traffic noise is highest during the morning and evening as employees travel to and from work. Noise measurements were recorded at SSC at four locations within the Fee Area in 1974 when no rocket tests were being conducted. The results of these measurements and their comparison with the Federal Highway Administration's design level are summarized in the SSC ERD.

It is important for NASA, resident agencies, contractors, and commercial customers to notify NASA Environmental Management when their activities will generate noise levels above background levels.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 27 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 11 - Required Actions under the Noise Control Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.11.3	Notification if activities will produce noises significantly above background levels.	NASA, Resident agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As Required

3.12 Radiation Control

3.12.1 Applicable Laws and Regulations

Atomic Energy Act (42 USCA § 2021h); 10 CFR 20

3.12.2 Radiation Management

The Atomic Energy Act establishes a program of Federal regulation of atomic energy and materials, including source, special nuclear and byproduct materials. The Act also includes protection of the public from radiation exposure. 10 CFR 20 establishes permissible dose levels and concentrations of radiation, precautionary procedures, and waste disposal procedures. The NASA Environmental Management maintains an inventory of radiation sources in the ERD.

Resident agencies, contractors, and commercial customers are required to maintain compliance with all regulations governing the procurement and use of radioactive materials and ionizing/non-ionizing radiation producing machines or devices. The NASA Environmental Management must be notified whenever a radiation source is added or removed from SSC.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 28 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 12 - Required Actions under the Atomic Energy Act

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.12.2	Maintenance of licenses for all radiation sources in each organization	NASA, Resident Agencies, Contractors, Commercial Customers	File copies	As Required
3.12.2	Provide inventory of radiation sources to NASA Environmental Management	NASA, Resident agencies, Contractors, Commercial Customers	As deemed necessary by NASA	Annually
3.12.2	Maintain site inventory of radiation sources both ionizing and non-ionizing	NASA Environmental Management	Reports	Update Annually

3.13 Historical and Archaeological Resources Management

3.13.1 Applicable Laws and Regulations

National Environmental Policy Act (42 USCA § 4371 et seq.); National Historic Preservation Act (16 USCA § 470 et seq.); Archaeological Resources Protection Act (16 USCA § 470aa to 470mm); Archaeological and Historic Preservation Act (16 USCA § 469 to 469c); 36 CFR 800; 40 CFR 6; Executive Order 11593

3.13.2 Historical Resources

The purpose of the National Historic Preservation Act is to ensure that places of historic value are preserved and enhanced. Section 100(a)(2) was amended in 1992 to require that Federal agencies establish a historic preservation program for the identification and protection of historic properties under their jurisdiction. In response, the SSC Environmental Management implemented the SSC Historic Preservation Plan in 1995. The SSC Historic Preservation Plan discusses specific short term and long term management actions required by Federal laws and regulations for the proper protection and stewardship of identified historic properties at SSC.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 29 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

The Rocket Propulsion Test Complex is the only property at SSC that is on the National Register of Historic Places. The Rocket Propulsion Test Complex includes the A-1 Test Stand (Building 4120), the A-2 Test Stand (Building 4122), and the B1/B2 Test Stand (Building 4220/4221). These test stands and associated control centers have been designated because they were used for the testing of Saturn rockets that were utilized in landing men on the moon. The historic town sites of Gainesville and Logtown, Mississippi are not on the National Register of Historic Places, but a nomination has been submitted for Gainesville.

No actions may be initiated that would alter or modify the above listed historic properties without approval from NASA Environmental Management. This includes actions that may be considered routine maintenance, such as painting.

3.13.3 Archaeological Resources

In 1988 the Corps of Engineers (COE) conducted an archaeological reconnaissance on all land within the SSC Fee Area. The survey found that, historically, the land at SSC has been severely disturbed by timber harvesting and the associated naval stores industry during the late nineteenth and early twentieth centuries. The land was also disturbed by the construction of the Center during the 1960s, making it unlikely that undisturbed archaeological sites would be found.

The COE concluded that within the Fee Area, only the town site of Gainesville would require archaeological considerations if land-disturbing activities were proposed for that area.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 30 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 13 - Required Actions Related to Historical and Archaeological Resources

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.13.2	Notification upon discovery of artifacts or other historically or archaeologically significant objects	NASA, Resident Agencies, Contractors, Commercial Customers	Verbal report	As required
3.13.2	Notification prior to activities that may alter or modify the listed historic properties (test stands)	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.13.2	Inspections of Logtown and Gainesville	FOSC Environmental Services	Checklist to NASA Environmental Management	Quarterly
3.13.2	Report to State Historic Preservation Officer	NASA Environmental Management	Description of activities affecting historic properties	Annually
3.13.2	Report to Congress on Historical and Archaeological Activities	NASA Environmental Management	Description of activities affecting historic properties	Annually
3.13.2	Consultation with State Historic Preservation Office prior to modification of historic properties	NASA Environmental Management & Preservation Office	Letters	As required

3.14 Management of Fish, Wildlife, and Protected Species

3.14.1 Applicable Laws and Regulations

Endangered Species Act (16 USCA § 1531 to 1544); Fish and Wildlife Conservation Act (16 USCA § 2901 et seq.); Fish and Wildlife Coordination Act (16 USCA § 661 to 666c);

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 31 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

National Environmental Policy Act (42 USCA § 4371 et seq.); 40 CFR 6; Guidance for Presidential Memorandum on Environmentally & Economically Beneficial Landscape Practices on Federal Landscaping Grounds (60 Fed. Reg. 40837)

3.14.2 Fish and Wildlife Conservation

The Fish and Wildlife Conservation Act of 1980 provides assistance to the States for the development and implementation of conservation programs for non-game fish and wildlife. It also mandates that Federal agencies utilize their statutory and administrative authority to conserve and to promote conservation of non-game fish and wildlife and their habitats. The Department of Wildlife, Fisheries, and Parks implements conservation programs in the State of Mississippi.

The Fish and Wildlife Coordination Act deals with the potential impacts of water resource development projects on wildlife. Specifically, the Act requires mitigation actions to protect wildlife resources whenever "the waters of any stream or other body of water are impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified". Wildlife resources "include birds, fishes, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent." The Fish and Wildlife Coordination Act is administered by the Department of Interior through the U.S. Fish and Wildlife Service (USFWS).

The National Environmental Policy Act (NEPA) requires similar measures before any project to control or modify any natural body of water. NEPA specifically requires Federal agencies to consult with the USFWS and the appropriate State agency to determine the "measures necessary to mitigate, prevent and compensate for project-related losses of wildlife resources and to enhance the resources." The reports and recommendation of the wildlife agencies must be incorporated into the environmental assessment or the environmental impact statement.

3.14.3 Preservation of Threatened and Endangered Species

The Endangered Species Act of 1973 was enacted "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered and threatened species." The term "endangered species" applies to any species, which is in danger of extinction throughout all, or a significant portion of its range. A "threatened species" is any species, which is likely to become an endangered species within the foreseeable future throughout all, or a significant portion of its range. The Secretary of Interior makes determinations of threatened or endangered status in conjunction with the Secretary of Commerce.

Section 7 of the Endangered Species Act requires all Federal agencies to consult with the USFWS on all actions that may affect a threatened or endangered species or its habitat. The

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 32 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

rules and requirements for these consultations are delineated in 50 CFR Part 402, which includes forms, substance, and timing.

Although SSC is not considered by the U. S. Fish and Wildlife Service updates to have threatened and/or endangered species, it is possible that such species may be encountered. The site provides stable habitat that could support several other threatened and endangered species. For this reason, any project or action that has the potential to impact habitat must exercise caution during construction. NASA Environmental Management maintains a list of all species of concern, and their state and federal protection status.

All SSC personnel must consult with the NASA Environmental Officer prior to initiating any project that has the potential to impact for threatened, endangered, or otherwise protected species. All species shall be considered as protected unless otherwise directed by the NASA Environmental Management.

3.14.4 Landscape Management

SSC environmental landscaping goals are to use regionally native plants; design, use, or promote construction practices that minimize adverse effects on the natural habitat; prevent pollution; implement water-efficient practices; and create outdoor demonstrations. To this end, any landscape design should adhere to the following guidelines:

- a. Complement existing and planned structures
- b. Emphasize a unified site pattern, help define traffic arteries and create an overall consistent unity in the choice of trees, shrubs, and lawns
- c. Contribute to safety at intersections and crossings
- d. Consider the ultimate in growth, form, size, and color of the plants selected, and the cultural requirements such as moisture, drainage, and maintenance
- e. Reforest for aesthetic and utility considerations
- f. Correlate design with utility lines, storm drains, and sewer systems
- g. Utilize native species

Benefits associated with implementation of the plan include the reduction in use of water, pesticides, and fertilizers. Also there will be a reduction in maintenance costs, an increase in erosion control, and utilization of hardy plants. By implementing the plan, SSC will promote regional identity and enhance wildlife habitat and biodiversity.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 33 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

All projects that involve landscape design or have the potential to affect current landscape; wildlife, forested areas, and recreational areas must be coordinated through NASA Environmental Management so that potential impacts can be properly assessed. Contact with NASA Environmental Management is encouraged to ensure that proposed actions comply with the SSC Land Management Program. The Land Management Program also includes various supplementary plans and recommendations for economic development and management of the resources available at SSC. These resources include forestry products, wildlife, recreation, and transportation.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 34 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 14 - Required Actions Related to Fish, Wildlife, and Protected Species

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.14.2	Notification prior to activities that may alter or modify a stream or other natural body of water	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.14.2	Consult with USFWS and State regarding mitigation actions to protect wildlife	NASA Environmental Management	Official letter	Prior to projects which would alter waterways
3.14.3	Notification to Environmental Office upon sighting or otherwise encountering any species that may be threatened or endangered	NASA, Resident Agencies, Contractors, Commercial Customers	Official letter	As required
3.14.3	Notification prior to activities that may affect protected species or their habitat	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.14.3	Consult with USFWS regarding projects which could affect protected species (Section 7 consultation)	NASA Environmental Management	Official letter	Prior to project initiations
3.14.4	Notification regarding the landscaping activities inclusive of the utilization of native plants in accordance with the April 26, 1994 Executive Memorandum.	NASA, Resident Agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	Number	Rev.
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 35 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.15 Management of Lead-Containing Materials

3.15.1 Applicable Laws and Regulations

Federal Water Pollution Control Act (33 USCA § 1251 to 1387); Resource Conservation and Recovery Act (42 USCA § 6901 to 6992k); Clean Air Act (42 USCA § 7401 to 7671q); Occupational Safety and Health Act (29 USCA § 651 et seq.); 29 CFR 1910.1025; 29 CFR 1926.62; 40 CFR 52 and 81; 40 CFR 261

3.15.2 Lead-Containing Materials

Lead-containing materials were used at SSC for paint and paint primers for many years. The SSC Lead Hazard Control Plan provides an operations and maintenance plan for managing lead at SSC. This Plan defines a policy of management in place. This means that, as long as lead-containing materials are intact and not posing a health or environmental hazard, they will be maintained in place. If such materials are damaged, or would be impacted by other work in the area, a strategy will be developed to repair, remove, and/or replace the lead-containing materials.

Controls specified in the Lead Hazard Control Plan include maintenance work practices, worker protection measures, and medical monitoring, training, record keeping, and waste disposal. The NASA Environmental Management monitors design reviews to ensure regulatory requirements are addressed in projects involving lead-containing materials.

3.15.3 Lead Waste Disposal

Scrap metal resulting from demolition activities will be transported to Redistribution for recycling. This includes scrap metal with lead-based coatings (the EPA has exempted this type of waste from the definition of hazardous waste). All other debris generated from operations where lead-based coatings are present must be sampled and analyzed in accordance with EPA Method 1311 – the Toxicity Characteristic Leaching Procedure (TCLP). The results of the TCLP analysis will determine the hazard classification of the material that was sampled. If the TCLP lead concentration is less than 5 mg/liter, the material may be disposed of in the SSC Class II landfill. If the TCLP lead concentration is equal to or greater than 5 mg/liter, the material shall be handled and disposed of as hazardous waste. Hazardous waste management procedures can be found in *SSC Hazardous Materials, Hazardous Waste, and Solid Waste Plan*.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 36 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 15 - Required Actions Related to Lead Management

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.15.2	Notification prior to activities that may impact lead painted surfaces or other lead-containing materials	NASA, Resident agencies, Contractors, Commercial Customers	PES to NASA Environmental Management	As required
3.15.2	Training for workers involved in lead-related work	NASA, Resident Agencies, Contractors, Commercial Customers	Training Records	Annually
3.15.2	Medical monitoring for workers involved in lead-related work	SSC Medical Director	Medical Records	Annually
3.15.3	Request for collection and disposal of lead-contaminated waste	NASA, Resident Agencies, Contractors, Commercial Customers	SSC-696F	As required

3.16 Pollution Prevention and Affirmative Procurement

3.16.1 Applicable Laws and Regulations

The Pollution Prevention Act of 1990, Solid Waste Disposal Act (Section 6002) as revised by the Resource Conservation and Recovery Act (42 USCA § 6901 to 6992k); Clean Air Act (42 USCA § 7401 to 7671q); Emergency Planning and Community Right-to-Know Act (42 USCA § 11001 to 11050); Use of Recovered Materials (FAR Part 23.4); Comprehensive Procurement Guideline for Products Containing Recovered Materials (40 CFR Part 247)

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 37 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

3.16.2 Pollution Prevention and Affirmative Procurement

The Pollution Prevention (P2) Program Plan delineates the responsibilities and establishes the procedures relevant to pollution prevention inclusive of required recycling activities and affirmative procurement.

As a minimum, all discarded paper and cardboard must be recycled and all products listed in 40 CFR 247, Subpart B, must be purchased with the required percentage of recycle material, unless a waiver is granted in accordance with regulations. The quantities of items recycled and the items bought with the required recycled content must be recorded and reported. Aluminum can recycling is also offered onsite in areas that sell products containerized in aluminum cans.

Specific actions required by NASA, resident agencies, contractors, and commercial customers are outlined in the following table.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 38 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Table 16 - Required Actions Related to Pollution Prevention

§	Action/Requirement	Responsible Party	Reporting Method	Frequency
3.16.2	Update of the P2 Plan	FOOSC Environmental Services	Plan	As required
3.16.2	Recycling of paper, cardboard and aluminum cans	NASA, Resident Agencies, Contractors, Commercial Customers	N/A	Daily
3.16.2	Reporting of Recycling activities	FOOSC Environmental Services	Report and NETS	Quarterly/ Annually
3.16.2	Purchase recycle content materials	NASA, Resident Agencies, Contractors, Commercial Customers	Purchase Request	As required
3.16.2	Request for Waiver to purchase required recycle content items	NASA, Resident Agencies, Contractors, Commercial Customers	SSC Form # 747	As required

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		
		Page 39 of 47

CHAPTER 4. LAWS AND REGULATIONS

4.1 United States Codes

7 USCA	136	Federal Insecticide, Fungicide, and Rodenticide Act
42 USCA	11001	Emergency Planning and Community Right-to-Know Act
15 USCA	2601	Toxic Substance Control Act
16 USCA	1536	Endangered Species Act of 1973
16 USCA	461	Historic Sites, Buildings and Antiquities Act
16 USCA	469	Archaeological and Historic Preservation Act of 1974
16 USCA	470	National Historic Preservation Act of 1966
16 USCA	1361	Marine Mammal Protection Act
16 USCA	1451	Coastal Zone Management Act of 1972
16 USCA	2901	Fish and Wildlife Conservation Act
33 USCA	401	The Rivers and Harbors Act of 1899
33 USCA	1251	Federal Water Pollution Control Act (Clean Water Act)
33 USCA	1401	Marine Protection, Research, and Sanctuaries Act of 1972, as amended (16 USCA 1431)
42 USCA	300f	Safe Drinking Water Act
42 USCA	2021	Atomic Energy Act of 1954
42 USCA	4371	National Environmental Policy Act of 1969 as amended by the Environmental Quality Improvement Act of 1970
42 USCA	4901	Noise Control Act of 1972
42 USCA	6901	Resource Conservation and Recovery Act

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 40 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

42 USCA 7401 Clean Air Act

41 USCA 9601 Comprehensive Environmental Response, Compensation and Liability Act
(CERCLA) as amended by Superfund Amendments and Reauthorization
Act (SARA)

4.2 Code of Federal Regulations

10 CFR 20 Nuclear Regulatory Standards for Protection Against Radiation

14 CFR 1204.15 Intergovernmental Review of NASA programs and activities

14 CFR 1216 NASA Environmental Quality

15 CFR 930 Federal Consistency with Approved Coastal Management Programs

29 CFR 1910.1200 Toxic and Hazardous Substances

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

33 CFR 322 Permits for Structures of Work In or Affecting Navigable Waters of the
United States

33 CFR 323 Permits for Discharge of Dredged or Fill Material into Waters of the
United States

33 CFR 330 Nationwide Permits

36 CFR 60 National Register of Historic Places

36 CFR 800 Protection of Historic Properties

40 CFR 50-88 Air Programs

40 CFR 112 Oil Pollution Prevention

40 CFR 122.26 Stormwater Discharges

40 CFR 140-149 Subchapter D, Water Programs

40 CFR 141 National Primary Drinking Water Regulations

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Page 41 of 47		
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

40 CFR 143	National Secondary Drinking Water Standards
40 CFR 150-186	Subchapter E, Pesticide Programs
40 CFR 201-211	Noise Abatement Programs
40 CFR 230	Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material
40 CFR 240-281	Subchapter I, Solid Wastes
40 CFR 247	Subpart B, Comprehensive Procurement Guideline for Products Containing Recovered Materials
40 CFR 261	Listed Hazardous Wastes
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 270	Hazardous Waste Permit Program
40 CFR 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 302	Designation, Reportable Quantities and Notification
40 CFR 311	Worker Protection
40 CFR 350	Trade Secrecy Claims for Emergency Planning and Community Right-to-Know
40 CFR 355	Emergency Planning and Notification
40 CFR 372	Toxic Chemical Releases

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

40 CFR 700-750 Subchapter R, Toxic Substances Control Act

40 CFR 761 Polychlorinated Biphenyls

40 CFR 1500-1508 Chapter V, Council on Environmental Quality, NEPA Regulations

49 CFR 171-195 Department of Transportation, Hazardous Material Regulations

50 CFR 402 Interagency Cooperation, Endangered Species Act of 1973

4.3 Executive Orders

Executive Order 11514 Protection and Enhancement of Environmental Quality

Executive Order 11593 Protection and Enhancement of the Cultural Environment

Executive Order 11988 Floodplain Management

Executive Order 11990 Protection of Wetlands

Executive Order 11991 Amends 11514

Executive Order 12088 Federal Compliance With Pollution Control Standards

Executive Order 12114 Environmental Effects Abroad of Major Federal Actions

Executive Order 12372 Intergovernmental Review of Federal Programs

Executive Order 13101 Greening the Government Through Waste Prevention, Recycling,
and Federal Acquisition

Executive Order 13148 Greening the Government Through Leadership In Environmental
Management

4.4 State Regulations

Mississippi Code Annotated, Title 17, "Mississippi Solid Waste Disposal Act of 1974", and its amendments; Sections 17-17-1 through 17-17-59 and 17-17-213, 17-17-229, 17-17-231, 21-27-207, and 49-17-17

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 43 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

Mississippi Code Annotated, Title 49, "Mississippi Underground Storage Tank Act" and its amendments, Sections 49-17-401 through 49-17-433

Mississippi Department of Environmental Quality Air Regulations APC-S-1 through APC-S-6

Mississippi Department of Environmental Quality Hazardous Waste Management Regulations

Mississippi Department of Environmental Quality Non-Hazardous Waste Management Regulations

Mississippi Pesticide Application Law of 1975

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

APPENDIX A - ACRONYMS

CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (also known as Superfund)
CFR	Code of Federal Regulations
COE	U.S. Army Corps of Engineers
CWA	Clean Water Act (Federal Water Pollution Control Act)
EA	Environmental Assessment
EO	Environmental Officer
EPA	Environmental Protection Agency
EIS	Environmental Impact Statement
ERD	Environmental Resources Document
FAR	Federal Acquisition Regulation
FOSC	Facility Operating Services Contractor
HATC	Hardware Assurance Testing Contractor
ICP	Integrated Contingency Plan
ID	Identification
MDEQ	Mississippi Department of Environmental Quality
MSDH	Mississippi Department of Health
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NPD	NASA Policy Directive

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

NPDES National Pollution Discharge Elimination System

NPG NASA Procedures and Guidelines

NRHP National Register of Historical Places

PCB Polychlorinated Biphenyl

RCRA Resource Conservation and Recovery Act

SARA Superfund Amendments and Re-authorization Act

SCWI Stennis Common Work Instruction

SDWA Safe Drinking Water Act

SPG Stennis Procedures and Guidelines

SSC Stennis Space Center

SWR Stennis Work Request

T&E Threatened and Endangered Species

TSCA Toxic Substances Control Act

TTSC Test and Technical Services Contractor

USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date:	December 21, 2001
	Expiration Date:	December 21, 2006
Responsible Office: RA02/Center Operations and Support Directorate		Page 46 of 47
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

APPENDIX B - DEFINITIONS

Code of Federal Regulations - The regulations published in the Federal Register by the Executive Departments and agencies for implementation of Federal Congressional Acts.

Threatened or Endangered Species - Any species (including subspecies), which is in danger of extinction throughout all or a significant portion of its range.

Executive Order - Presidential orders to agencies of the Executive Branch of the Federal Government that have the weight of law.

Hazardous Waste Management - Systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous wastes.

Hazardous Waste Sites - A location where hazardous wastes are stored, treated, incinerated, or otherwise disposed.

Listed Species - Any species (including subspecies) of fish, wildlife, or plants listed as either endangered or threatened in accordance with 50 CFR 17.11 and 17.12.

Mississippi Department of Environmental Quality - The environmental regulatory and enforcement authority for the State of Mississippi.

PCB - Polychlorinated Biphenyl - Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees, or any combination of substances which contain such substance.

Pesticide - Any substance, organic or inorganic, used to destroy or inhibit the action of plant or animal pests; the term thus includes insecticides, herbicides, rodenticides, miticides, etc.

Pollution - Any substance introduced into the environment (not normally present) that is potentially toxic or otherwise objectionable.

Radioactive Material - A material that undergoes spontaneous decay by the emission of energy in the form of high energy rays. Radioactive materials are regulated by 10 CFR.

Recycling - Reclaiming a material for purposes of beneficial reuse.

Resource Conservation and Recovery Act - The Federal Act which governing solid and hazardous wastes.

United States Code (USCA) - Federal Congressional Acts.

Stennis Procedures and Guidelines	SPG 8500.2	Basic
	<i>Number</i>	<i>Rev.</i>
	Effective Date: December 21, 2001	
	Expiration Date: December 21, 2006	
	Page 47 of 47	
Responsible Office: RA02/Center Operations and Support Directorate		
SUBJECT: Environmental Operations and Implementation Program Procedures and Guidelines		

United States Environmental Protection Agency (USEPA) - Agency of the Federal Government with environmental protection regulatory and enforcement authority.